EASL Equipment Inventory

Microscopes

AmScope PZ600 Series Polarized Light Microscope
The AmScope PZ600 is a polarized light microscope with both transmitted and reflected light (50x-500x) for the examination of mineralogical and metallurgical samples. The microscope is equipped with a 18MP digital camera for photomicrography.

Bausch and Lomb StereoZoom (7-30x)
The Bausch & Lomb Stereo Zoom 7 is a binocular microscope providing 7-35x magnification. The microscope is on a boom stand which allows for the examination of small samples as well as larger artifacts. The microscope is equipped with a small light to illuminate from above, but there is also the option to use a Fostec Ace dual fiber optic goose-neck illuminator for object and sample examination.

Inverted Trinocular Metallurgical Microscope (50-400x)
The Inverted Stage Trinocular Metallurgical microscope allows for the examination of mounted metallurgical samples using both bright field and polarized light (50-400x). Mounted cross-sections of other types of samples can also be examined. The photo tube allows for the attachment of a digital camera for photomicrography.

Nikon Eclipse E200 Microscope (40-1000x)
The Nikon Eclipse E200 is a transmitted light microscope (40-1000x) that uses LED light illumination for brighter, sharper and clearer images.

Additional stereomicroscopes and a polarized light microscope are available for teaching. Contact the lab director for more details.
**Analytical Equipment**

**Bruker Tracer 5i portable XRF (pXRF)** The Tracer 5i is used for the elemental analysis of archaeological and geological materials. It has a silicone drift detector (SDD) with an (Rh) thin window X-ray tube. It is equipped with several internal filters, as well as a manual filter (25µ Ti) for the detection of light elements. A vacuum pump as well as an attachment for the use of helium are available to increase the detection of light elements, especially Na. The 5i comes with several built in calibrations files for the quantitative analysis of a wide range of materials.

**Bruker Tracer SD-III portable XRF (pXRF)**
The Tracer SD-III pXRF is used for the elemental analysis of archaeological and geological materials. It has a silicone drift detector (SDD) with an Rh target X-ray tube and Pd slits. 4 manual filters are available for use as well as a vacuum pump for the increased detection of lighter elements. The primary use is for qualitative analysis but an Obsidian calibration file and Mudrock calibration files (used for clays, and ceramics) is provided for quantitative analysis. Software is also available for making your own calibration files.

**Sample Preparation**

**MK Diamond Tile Saw (MK-0471564)**
The MK Diamond Tile Saw (MK-0471564) is a light weight and portable wet cutting tile saw. The saw is equipped with a diamond blade for sampling ceramic and stone materials.

**LECO Wet/Dry Polisher Grinder (GP-25)**
The LECO GP-25 is a constant speed, wet or dry, grinder/polisher with dual 8" diameter aluminum wheels.
**Thermolyne Hot Plate 1900**
The Thermolyne Type 1900 hot plate is a general purpose heating device used for laboratory procedures. It has a stainless steel housing and an aluminum top plate (6.25” × 6.25”). The temperature range is 0-371°C (700°F).

**Fisher Scientific Versamix Magnetic Stirrer (Model 115)**
The Fisher Scientific Versamix is a general purpose magnetic stirrer allows for the automatic stirring of solutions during laboratory procedures.

**International Equipment Co. Centrifuge (Model HN)**
The IEC centrifuge, model HN, can be used with different sized swing rotors to accommodate centrifuge tubes up to 50mL. The speed ranges from 500-3385 RPM when full. The centrifuge also comes equipped with a timer.

**IEC International Clinical centrifuge (Model CL 3562M-1)**
The IEC Clinical centrifuge can be used with different sized swing rotors to accommodate centrifuge tubes up to 50mL.
**Additional Equipment**

**SKUTT Kiln Sitter Kiln (614-3)**
The SKUTT KS614-3 Kiln is a small kiln used for experimental firings of pyrotechnological materials. The chamber has an opening 11" x 11" and a depth of 13" (0.8 ft³). The maximum temperature it can reach is 2250°F (1232°C) or Cone 6.

**Brent Electric Potter's Wheel (Model C)**
The Brent Electric Potter’s Wheel (Model C) has a ¾ HP motor that allows it to handle up to 225 lbs. of clay continuously. It comes equipped with a 14” cast aluminum wheel head and a splash pan. The wheel speed ranges from 0-240 rpm.

**SKUTT Potter's Kickwheel**
The Skutt Potter’s Kickwheel has a 14” cast aluminum wheel head and a splash pan. The 140 lb. flywheel allows the wheel head to spin for longer.